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10/749,341	12/31/2003	Manish Seth	60732-300101	8224

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EXAMINER

SANDERS, KRIELLION ANTIONETTE

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,341

Applicant(s)

SETH, MANISH

Examiner

Kriellion A. Sanders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/14/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandon et al, US Patent No. 6114007 in view of Troutman et al, US Patent Publication 2004/0002559.

Brandon et al discloses fire resistant, composite molding compositions containing an effective amount of a flame retardant additive. Reinforced products made according to the invention, such as composite roofing or construction materials, are rendered fire resistant in that the flame retardant additive, when exposed to temperatures high enough to cause combustion of the composite, decomposes and releases gases which act as flame suppressants. Also disclosed is a method of making suitably fire resistant composites, and articles formed therefrom. This method includes blending a resin, reinforcing fiber and filler in a mixer adding a liquid resin which would function as a lubricant, and extruding the mixture through a die. See col. 3, line 19 through col. 5, line 47.

The inorganic filler, when used, may be used at any desired amount, for example, at a concentration of from about 20% by weight to about 90% by weight of the composition. Preferably, the amount of filler is from about 40% by weight to about 80% by weight. The PVC powder can be present in an amount of from about 1 to about 75% of the filler. Fillers that are

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useful for the patented resin resin system include slate flour, calcium carbonate, silicates, ground rock and clays. Where the composite is used to make roofing materials, slate flour is preferably used as the filler because it contributes to development of a desirable color in the molded product.

Various additional additives employed in the invention include fillers, catalysts, colorants, mold release agents and inhibitors. The formulations of the patented invention find utility in the manufacture of composites for uses in industries including but not limited to roofing, exterior floor and wall tiles, exterior siding, construction or automotive. A preferred use of the composite formulations is in the manufacture of construction materials such as roofing shingles or shakes.

The latter articles may take the form of the traditional "double coverage" layered tiles in which a significant portion of the shingle tile is covered or overlapped by the exposed portion of a superimposed tile. The composite formulations of the invention are however also sufficiently lightweight and durable to permit the manufacture of "single coverage" tiles in which only a small area of overlap is required between tiles.

Troutman et al Provides flame retardant coating compositions and articles coated therewith, which compositions comprise (A) a coating and (B) an effective flame retarding amount of a mixture of (i) at least one compound selected from the group consisting of the (a) sterically hindered nitroxyl stabilizers, (b) sterically hindered hydroxylamine stabilizers and (c) sterically hindered alkoxyamine stabilizers and (ii) at least one conventional flame retardant selected from the group consisting of (d) organohalogen flame retardants, (e) organophosphorus

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flame retardants, (f) isocyanurate flame retardants and (g) melamine based flame retardants. The coated articles are for example iron, steel, stainless steel, aluminum and other non-ferrous metals, wood, plywood, paper, cardboard, chip board, particle board, plastics, thermoplastics, epoxies, neoprene, rubber

Patentee includes fillers such as talc, calcium carbonate, magnesium carbonate, zinc borate, silicates, silicones, glass fibres, glass bulbs, asbestos, kaolin, mica, barium sulfate, calcium sulfate, metal oxides, hydrates and hydroxides such as zinc oxide, magnesium hydroxide, alumina trihydrate, silica, calcium silicate, magnesium silicate. Suitable substrates for the patented coatings include iron, steel, stainless steel, aluminum and other non-ferrous metals, wood, plywood, paper, cardboard, chip board, particle board, plastics, PVC (polyvinyl chloride), thermoplastics, thermoplastic polyolefin, epoxies, neoprene, rubber and composites.

The patented coatings may be applied to exterior siding, interior structures, roofing, garages, ceilings, penetration barriers, and PVC wrappings. The coatings may be employed in private homes, hotels and offices, for example as applied to wallpaper, paneling, drywall, wallboard, wainscoting, trusses, flooring and subflooring, studs, architectural millwork and trim, tiles, exterior decks, ceiling tiles, kitchen cabinets, kitchen hoods, carpet backing, interior walls, doors, file cabinets, office furniture, safes and barriers. The patented coatings may also be applied to structural substrates. Suitable wood substrates suggested in the reference include dimensional lumber, plywood, particle board, OOSB board, unfinished interior wood, plywood acoustical board, insulation board, cellulose board, fiberboard, excelsior (wood wool), wood shavings, cedar shakes, unsheathed shingles, shakes, siding, telephone poles, posts, paper, paperboard, cardboard and corrugated sheets.

The patented compositions may contain additional components such as pigments, dyes, plasticizers, antioxidants, thixotropic agents, levelling assistants, basic costabilizers, further light stabilizers like UV absorbers and/or sterically hindered amines, metal passivators, metal oxides, organophosphorus compounds, hydroxylamines, and mixtures thereof, especially pigments, phenolic antioxidants, calcium stearate, zinc stearate, UV absorbers of the 2-(2'-hydroxyphenyl)benzotriazole and 2-(2-Hydroxyphenyl)-1,3,5-triazine classes, and sterically hindered amines. The compositions may also comprise silica. See page 1, paragraph [0018] through page 3, paragraph [0065] and page 19, paragraph 0323 through page 20, paragraph [0337].

Because Troutman et al documents that various additives are conventional in compositions used to form components for building materials such as roofing, the inclusion of metal stearates, talc silica and metal oxides in the molding compositions of Brandon et al would have been obvious to one of ordinary skill in the art at the time of applicant's invention. The selection of a virgin polymer or recycled polymer is usually determined by cost considerations and there is nothing unobvious in such a limitation. Brandon discloses such a wide variety of building components that may be formulated by the patented method that panels and embossed components would be considered obvious to the ordinary practitioner of this art.

Response to Arguments

3. Applicant's arguments filed 9/14/06 have been fully considered but they are not persuasive.

4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the

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presently claimed composition is thermoplastic as opposed to a thermoset composition as disclosed by Brandon et al) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant's claims are directed to a formulation for synthetic building materials comprising 10-35% of a thermoplastic resin, such as PVC. Brandon et al discloses a formulation for synthetic building materials comprising PVC in an amount ranging from 1-75% by weight.

5. Troutman et al is relied upon to document that various additives are conventional in compositions used to form components for building materials such as roofing, the inclusion of the metal stearates, talc silica and metal oxides of Troutman et al in the molding compositions of Brandon et al would have been obvious to one of ordinary skill in the art at the time of applicant's invention.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122.

The examiner can normally be reached on Monday through Thursday 6:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kriellion A. Sanders
Primary Examiner
Art Unit 1714

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